NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Life Science The History of Life on Earth (8.1-8.2 Outline)**

***AS YOU READ, RESPOND TO THE FOLLOWING:***

*Vocabulary*: **Define in your own words:**

Relative dating-

absolute dating-

plate tectonics-

geologic time scale-

*Respond to the following questions/ prompts:*

Explain one way fossils can form. (2 pts)

Explain how absolute dating and relative dating can be used to determine the age of a fossil. Describe how the two dating methods are different. (3 pts)

What was Pangaea? Also, explain how plate tectonics have created created conditions for adaptations to evolve. (3 pts)

Describe the major developments that led to the existence of life on Earth. Also, what did the first life on Earth look like? What kind of cells did it have? Explain. (4 pts)

Summarize the types of organisms that arose during the four major divisions of geologic time: Precambrian time, the Paleozoic era, the Mesozoic era, and the Cenozoic era. Also, explain what significant events took place at each time period. (12 pts; 3 pts each for the 4 time periods)

***ABOUT THE READING:***

Write three things that you learned about Geologic time:

***Make sure to write a full sentence.***

*Example: I learned that according to radiometric dating techniques, decay in rocks' elements have determined the Earth to be about 4.6 billion years old.*

***1.***

***2.***

***3.***

***Assigned work:*** Research an animal that has gone extinct in the past 200 years. Write a paragraph describing the events that led to the organism's extinction and if human actions affected the extinction. Possible extinct animals to research include: BIRDS; dodo, great auk, labrador duck, moa, and the passenger pigeon. MAMMALS; stellar's sea cow and the quagga. (8 pts possible)

\*\* A picture might be nice to supplement your paragraph, however, remember to cite the source\*\*